

1. Finality of the last office action paper #7 is hereby withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuruoka et al. (US Patent o. 6,373,190 B1) in view of Bongaers et al. (US Patent No. 5,596,431).

Tsuruoka et al. teaches a display device comprising:

a plate having longitudinal channels and peripheral part, which is adjacent to at least one side of the longitudinal channels, (See Fig.3, between items 34); wherein the peripheral part extends in a plane between a bottom plane trough the bottoms of the longitudinal channels, channels and a top plane through the top of the longitudinal channels, (See Fig.3, items 31-35, in description See Col.4, Lines 45-63); and each channel has a sloping ramp sloping from the bottom plane to the plane and ending in the peripheral part, (See Fig.3, items 31-35, in description See Col.4, Lines 45-63).

Tsuruoka et al. does not teach electrodes disposed in longitudinal channels.

Bongaers et al. shows PALC device with elongated electrodes which extend the full length of each channel (See Fig. 2, items 30-31, in description See Col. 5, Lines 1-6). It have been obvious to one of ordinary skills in the art at the time of invention to incorporate electrodes

disposed in longitudinal channels as shown by Bongaers et al. in Tsuruoka et al. apparatus in order to improve channel plate (See Col. 2, Lines 33-37 in Bongaers et al. reference).

3. Claim 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuruoka et al. and Bongaers et al. in view of Asano et al. (US Patent No. 6,353,288 B1).

Tsuruoka et al. and Bongaers et al. teach a display device with electrodes are provided at the bottom of the channels and each channel with the central part having a first depth, flanked at least on preferably both sides by a second portion having a reduced depth and fourth portion with the sloping ramp (See Fig. 4, items 41, 42, in description See Col. 5, Lines 3-19).

Tsuruoka et al. and Bongaers et al. do not teach about the second and third portion forming a groove in the plate, in which groove a sealing material is provided.

Asano et al. teaches about the grooves and bonding materials (See Fig. 7, items 1,2,13,24, in description See Col. 5, Lines 33-53).

It have been obvious to one of ordinary skills in the art at the time of invention to include grooves with sealing materials as shown by Asano et al. in Tsuruoka et al. and Bongaers et al. apparatus in order to provide a separation of the front plate (See Col. 5, Lines 44-53 in Asano et al. reference).

4. Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuruoka et al. and Bongaers et al. in view of French (US Patent No. 6,400,423 B1).

Tsuruoka et al. teaches a method of manufacturing a display device, the method comprising: providing a plate having longitudinal channels and peripheral part, which is

adjacent to at least one side of the longitudinal channels, (See Fig.3, items 31-35, in description See Col.4, Lines 45-63); wherein the peripheral part extends in a plane between a bottom plane through the bottoms of the longitudinal channels, channels and a top plane through the top of the longitudinal channels, (See Fig.3, items 31-35, in description See Col.4, Lines 45-63); and each channel has a sloping ramp sloping from the bottom plane to the plane and ending in the peripheral part (See Fig.3, items 31-35, in description See Col.4, Lines 45-63).

Tsuruoka et al. does not teach electrodes disposed in longitudinal channels.

Bongaers et al. shows PALC device with elongated electrodes extend the full length of each channel (See Fig. 2, items 30-31, in description See Col. 5, Lines 1-6). It have been obvious to one of ordinary skills in the art at the time of invention to incorporate electrodes disposed in longitudinal channels as shown by Bongaers et al. in Tsuruoka et al. apparatus in order to improve channel plate (See Col. 2, Lines 33-37 in Bongaers et al. reference).

Tsuruoka et al. and Bongaers et al. teach manufacturing ribs of a plasma display using a flexible roller-intaglio. (See in description Col. 2, Lines 41-44).

Tsuruoka et al. and Bongaers et al. do not show to provide peripheral part in plate at a depth between a bottom and a top of longitudinal channels, wherein channels are provided by moving a grinding wheel across plate along a direction, grinding being started at a position away from an outer edge of plate and being stopped before grinding wheel reaches an opposite outer edge of plate.

French teaches about channels being formed by mechanical grinding (See Col. 3, Lines 24-26). It have been obvious to one of ordinary skills in the art at the time of invention to incorporate manufacturing method as shown by French in Tsuruoka et al. and Bongaers et al.

apparatus in order to provide improved channel plate (See Col. 2, Lines 18-22 in French reference).

Response to Arguments

3. Applicant's arguments filed 01-09-03 have been fully considered but they are not persuasive. Applicant's argues that Tsuruoka's (41) is a mold having recesses, but not longitudinal channels. However, Fig. 3, between items 34 in Tsuruoka et al. reference clearly shows the longitudinal channels and peripheral part, which is adjacent to at least to one side of the longitudinal channels and each channel has a sloping ramp sloping from the bottom plane to the plane and ending in peripheral part.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonid Shapiro whose telephone number is 703-305-5661. The examiner can normally be reached on 8 a.m. to 5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703-305-4938. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

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